

VIRGINIA ROANOKE RIVER BASIN ADVISORY COMMITTEE MEETING MINUTES

Ebony Fire House

July 26, 2005

Attendance: VRRBAC members Read Charlton, Robert Conner, Dr. Rupert Cutler, John Feild, Haywood Hamlet, Evelyn Janney, John Lindsey, Mike McEvoy, and Charles Poindexter. Ann Austin represented Congressman Virgil Goode. DEQ: Greg Anderson, DCR: Tim Ott and Noah Hill

Call to Order:

Chairman Poindexter called the meeting to order.

Welcome:

Gerry Vincent, Administrator of Brunswick County, welcomed everyone to the county. He discussed the importance of the mission of VRRBAC to the basin and Brunswick County. He specifically cited water and the related uses of hydropower generation, commercial fishing, recreation, tourism, and manufacturing as being important to the region. He said the group's role in comprehensive planning, education, and bringing the issues to the forefront was essential. He expressed appreciation for the hard work of the Committee.

Recognition of Members and Visitors:

- Chairman Poindexter welcomed everyone and recognized members and guests who included Jennifer Everett and Hollie Rennell, NC Department of Environment and Natural Resources, Rives Manning, Harrel Johnson and Harold Carawan, Roanoke River Basin Association, Gerry Vincent, Brunswick County Administrator, Bill Reidenbach and Jean McCarter, VRRBAC Subcommittees, Bill Crowell, Director, Albemarle-Pamlico National Estuary Program, Bill Lindenmuth, Lake Gaston Association, and Skip Wiegersma, Aquatic Nuisance Control, Inc.
- Chairman Poindexter then recognized the efforts of past Chairman Feild in leading VRRBAC to this time.

January 10, 2005 and March 9, 2005 Meeting Minutes:

These minutes were approved.

Bill Crowell, Director, Albemarle-Pamlico National Estuary Program, "Overview of the Albemarle – Pamlico National Estuary Program (APNEP)"

- The program works under a grant from EPA to the NCDENR and in a partnership with VA DCR. The mission of the APNEP is to identify, restore, and protect the significant resources of the Albemarle-Pamlico Estuarine System. To us that is the entire watershed. We have staff in Raleigh, Washington, and Greenville NC, and Suffolk, VA.
- The National Estuary Program was established by Congress in 1987 through amendments to the Clean Water Act. The Albemarle-Pamlico Estuarine System is an estuary of "national significance". This was one of the first NEPs started and there are now 28 nationwide and 1 in Puerto Rico. Most of these programs are operated housed in state governments, universities, local governments, or non-profits. So all have different structures. During 1987 -1994 the Albemarle-Pamlico Estuary Study (APES) was conducted. This stopped at the first impoundment. There was a 95-member management committee overseeing the characterization of the study region. Over 150 research projects were funded. The Comprehensive Conservation and Management Plan (CCMP) for APNEP was developed and ratified by the NC Governor and approved by US EPA in 1994. During this time period multimillions of dollars were received in grants. That grant funding level has dropped to 0.5 million dollars now.

- Between 1995 and 2003 the CCMP was implemented. There are 5 River Basin Regional Councils and a Coordinating Council. Implementation activities include research, monitoring, outreach and education, demonstration projects, development of a MOA with Virginia, and strategic planning.
- Since 2003, there has been a restructuring of the program. Presently the structure is a Policy Board, a Citizen Advisory Committee, a Science & Technical Advisory Committee, and a Management Advisory Committee. Research, monitoring, outreach and education, demonstration projects, a MOA with Virginia and strategic planning are ongoing. The Science & Technical Advisory Committee is currently working on environmental indicators. The Management Advisory Committee has not been set up. The Citizen Advisory Committee, with 24 members, is being developed in an apolitical manner.
- The Albemarle-Pamlico Estuarine System is the Nation's 2nd largest estuary and the largest lagoon estuary. This makes the system different in that the water is impounded by the Outer Banks. A satellite picture was displayed of the region after hurricane Floyd. The sediment is quite obvious in the picture and he said that anoxic conditions were present at that time due to the organics in the water. There are approximately 30,000 sq. miles in the watershed Area. The APNEP Program Area established in 1997 is about 23,000 sq. miles, stops at the first impoundment, and encompasses 36 counties in NC and 19 counties/cities in VA.
- We implement our mission through the Comprehensive Conservation and Management Plan presents strategies to better manage and balance the environmental and economic resources in the nation's second largest estuary. The CCMP contains 49 management actions addressing regional concerns within 5 main categories. These are water quality, vital habitats, fisheries, stewardship, and implementation. There are 49 "Total Priority Actions" listed in the CCMP with 19 ongoing in 2005. 30 have been completed to date. The Policy Board is made up of 23-members and guides the CCMP implementation process. The keys to implementation are the staff, partnerships, leveraging of funds, support, demonstration, restoration, education, and awareness.
- Partnerships include NC Sea Grant, Carteret Community College, Weyerhaeuser, NC Division of Coastal Management, One NC Naturally, National Association of Marine Educators, NC Natural Heritage, Tar River Conservancy, FerryMon, Hampton Roads Planning District Commission, NC Division of Marine Fisheries, Environmental Education Fund, Estuary Live, PCS Phosphate, NCSU Water Quality Group, UNC-CH, Partnership for the Sounds, Several RC&Ds, Duke University, Pitt County, NCSU Extension, NC Division of Forest Resources, VA DCR, NCNEER, NC Coastal Federation, NOAA, Elizabeth City State University, NC National Estuarine Research Reserve, USFWS, The Nature Conservancy, Mid-Atlantic Association Marine Educators, NC Maritime Museum, One NC Naturally, East Carolina University, and more.

Funding:

- There is a cooperative agreement with EPA & NCDENR that primarily funds the project. The grant is provided from EPA, under Section 320 of the Clean Water Act (amended 1987) with matching Funds from NC (100% in-kind). The 1:1 match is required. The NC match is all in-kind services so the grant is really our only source of operating funds. Other National Estuary Program's (NEPs) match funds based on their structure. However, all estuaries get the same funds regardless of size. All funds go toward CCMP Implementation and provide for outreach (local & national), education, projects, and administration.
- The level of leveraged funds is used as a measure of success. APNEP is able to get \$4 for every \$1 received from the grant. EPA wants the Counties to match but it has not happened due to the fact that the State is holding back sales tax monies due some of the Counties. We hope to work through the General Assembly to get some money once the Policy Board is in place. Nationwide the match is about \$11:1.

- Communication tools includes the APNEP Beacon Newsletter which is mailed to over 1,000 people and is posted on the APNEP web site at <http://www.apnep.org>. The Citizens' Monitoring Network Newsletter is mailed to over 200 people and also posted on the web site.
- The APNEP staff includes Bill Crowell - Director, Joan Giordano - Public Involvement Coordinator, Dean Carpenter - Science Coordinator, Kelly Williams - Restoration Specialist, Noah Hill - VA Field Representative, Allen Clark - Citizens' Monitoring Network Coordinator, and a Vacant NC Field Representative position.
- The cornerstone of the NEP is collaborative decision-making and relies upon commitment, coordination, cooperation, and communication.

Restructuring Changes:

- An important change made during the program restructuring is the placement of the program under the Secretary of the Department of Environment and Natural Resources. Previously the program was in the Basin-wide and Estuarine Planning Unit in NCDENR-DWQ.
- The previous public involvement structure involving the 5 Regional Councils (River Basins) and the Coordinating Council did not include Virginia representation or a Science and Technical Committee. There was also a bulky membership with over 212 members representing the 5 Regional Councils. 3 representatives from each county were mandated. The coordinating council was comprised of 29 people. There were never more than 8 people who attended the meetings and once the funding dropped so did that participation. In addition, areas did not want to send more than 1 person to the meeting, the program was not a regulatory threat, and there was not any significant looming environmental issue that everyone was fretting about.
- Now the Policy Board oversees the Management Advisory Committee, Citizen Advisory Committee, and the Science & Technical Advisory Committee. The APNEP Office Staff works closely with the Policy Board and committees. This helps streamline the operation of the program and we are able to now go directly to a contract after approval of a project by the council. The Science & Technical Advisory Committee has 36 members and is the only functioning committee at this time. Members serve a 3-year term and are research people or experts involved in the technical areas. Some are from academia, engineers, and non-profits like the Nature Conservancy. None are agency personnel. The Management Advisory Committee has not been set up yet but will be mainly composed of NC and VA agency personnel. The Citizen Advisory Committee is being selected now and will have 24 members. It is anticipated they will meet 4 times per year.
- **Question: Bob Conner asked why the funding dropped so significantly.** The intent was to fund the early study and then have the State implement the plan without federal support. Then they found out the states could not do it, and thus provide some funding (at a lower level). It is a struggle to implement the plan with the money provided. Each gets the same money regardless of the size and complexity of the estuary. NEPs have agreed to not fight this among themselves.
- **Question: Bob Conner asked how you operate on the \$200000 left.** We depend upon the partners. Many actions are implemented from State in-kind services. To do anything of significant impact is hard because of our large program area. Hopefully with the new restructuring our council members will help guide us to focus areas, where we concentrate on certain issues for a few years or a particular project such as oyster restoration or requiring buffers are easements. With 49 management actions we do not impact those significantly with our operating funds. However the in-kind services provided by NC are used to carry out some of those actions, such as Basin Wide Planning, TMDL development, Storm-water Control, etc. These support the implementation of the CCMP.

- **Question: Dr Cutler asked why the Chesapeake Bay seems to get so much money as compared to the other estuaries.** Chesapeake Bay is a separate program within EPA and APNEP is one of the twenty-eight NEPs in the Nat. Estuary Program. **Are there other programs comparable to the Chesapeake Bay?** There are also separate Great Lakes and Gulf programs.
- **Question: Charles Poindexter asked how the Virginia side participates.** We have an agreement with DCR for which we fund 1/2 of Noah Hill's time. We would like to see Virginia participate in the match or leveraging of funds. There are already things you are doing with your basin plans and TMDLs that we are just not tracking. We need to improve communications.
- **Question: Bob Conner asked if any funding is provided for the Citizen Committee.** Some funding will come from the administrative portion of the funds. However they will not be paid. **Bob said all the political entities appoint these committees without funding and we serve because we want to. However the expense of gasoline and other associated costs adds up. For the citizens to continue their efforts and not be reimbursed for their services does not seem right. That's why you only get 10-20 % showing up.** This is a real issue as we can not pay for time. What we do is to offer a quality educational meeting and generally furnish food. The law used to say "will serve voluntarily without compensation or per diems. It now allows for extraordinary expense reimbursement subject to approval by the program director. So in the event rooms, etc. are needed there may be a method to reimburse.
- **Question: Dr. Cutler stated for people to attend these meetings they must feel it is worthwhile. He asked him to give some examples of agenda items that would entice people to attend the meetings.** They get to decide how we spend our money. They have control over about 70 % of our budget. Staff puts together a work plan and budget which is approved by them. Then we send the demonstration projects back out to the participating communities.
- **Question: Dr. Cutler asked who does the decision making with respect to the competitive demonstration projects.** The Coordinating Council decided in the past. So we put out RFPs and then meet with the Council who choose the projects and funding levels.
- **Question: Read Charlton asked does APNEP follow the Navy's pursuit of an air field in Washington, NC.** It is currently caught up in lawsuits and the Department is assisting the Navy in identifying a better location. **Suppose they ID another site in the estuary program boundary would you be involved?** We would like to be involved but may not have the opportunity. In the past we would inform the council of the issue and they would decide upon an approach. The Council can have positions that are not the State's position.
- **Question: Mike McEvoy asked what the biggest problems with the estuary are.** Nutrients! 2 of our rivers are very sensitive to nutrients. There is lots of N from the Neuse and Chowan basins and the Tar has some. Roanoke is better due to the dams and the fact that the floodplain is fairly intact. Other problems are fecal contamination due to local inputs, SAV loss, and fishing and recreation impacts.
- **Question: Ann Austin asked about their partnership with PCS Phosphate and if it was the facility on the Pamlico River. Yes. How are they doing?** They are actually doing pretty good. Much of their land has been reclaimed. The biggest issue at that facility now is groundwater use. Otherwise it's amazing to see the change (mitigation & restoration) out there.
- **Question: Read Charlton asked is Currituck sound included in the APNEP region.** Yes, all the way to Back Bay, VA.
- **Question: John Feild said with respect to the Albemarle Pamlico fisheries, your area of consideration stops at the first impoundment. Yet the spawning grounds for some of the anadromous species are impacted by the structures and accompanying flows, temperature and dissolved oxygen. How do you bridge that interface with the impoundments being upstream**

and your area of influence stopping at the base of the first impoundment. I wish I could give you an easy answer to that. We have to talk to people, involve our Basin-wide folks, Fish and Wildlife, Dominion Power and the Nature Conservancy. **You foresee that this Bi-State Commission may be able to surface and flush out some of these issues and come up with some accommodations that extend above the first impoundment.** I would like to mention we have this agreement with VA DCR to discuss those issues. Sometimes just having a joint meeting about those issues works to accomplish progress.

- **Question: Dr. Cutler commented one of the reasons I was interested in having you talk to VRRBAC was to try to figure a way to motivate people in the upper Roanoke River watershed including Smith Mt. Lake to be aware of the entire system and to reduce contamination that goes to the Roanoke River at our location based on the effects it was having on the estuary aquatic ecosystem. Much like we talk about the Chesapeake Bay initiative. It is a long way and a different State but the ecological issues are the same. We can have a better idea why it is important to minimize our contribution to the problem, if we understand the relationship and the effect on what is taking place in this estuary. Then we might have more success at protecting water quality at our end of the river. Do you have any advice in that regard?** A couple things let them know the river exists. Make them aware of the resource uses. Do public outreach such as TV/radio spots to inform the public that pet waste, excess fertilizers, and other things they do in their back yards are detrimental locally, regionally, and nationally. What leaves the URR Watershed can affect the scallops in the estuary. **Dr. Cutler replied that is exactly the type of point I want to make. We are in the process of forming either a Riverkeeper group or a Blueway group to address these sorts of questions and to provide educational programs and put volunteers together. Maybe even to become an extension of the role of our Greenway Commission. They will need that type of ammunition.** Bill said an alternative tactic, the “Chesapeake Club” just started in DC this last year. Their whole media approach is that if you liked to eat seafood than pay attention to what you do, whether washing your car, planting your garden, fertilizing your yard, etc... Ads are put on tv/radio, billboards on the metro, etc. They hired an advertising firm to market the campaign for them. **Noah Hill, DCR, said this is a joint effort by EPA and DCR. The goal was to make it not look like a government sponsored program. That’s why it is labeled the “Chesapeake Club” and the focus is on crabs and crab cake sandwiches. The slogan is “Save the Crab Cake Sandwich”. (For more information see <http://www.chesapeakeclub.org/>)**
- **Comment: Charles Poindexter explained that the SML FERC re-licensing was ongoing. He wants to be sure that any issues downstream would be brought to the workgroups attention, either through feedback from DCR or direct feedback from NC. Jennifer asked if NC was participating. No. Did you just start gearing up for this effort? Yes. We have had considerable DCR and DEQ. IF there is something they do not know about then somehow the feedback must come from NC. Harrel Johnson, RRBA, commented that this re-licensing would be via a new accelerated process by FERC, not seen in NC previously with VA Power. It is fantastic.** Charles said it was called the integrated license process. It leaves out a lot of the old stuff and is frontloaded with studies. He said that the process was accelerated and the studies would be completed by 2006. So if anything needs to be brought up it needs to rather quickly. Jennifer said that was a good point and we will get the word back.

Jennifer Everett, NCDENR, Division of Water Quality Basin-wide Planning Program; “Water Quality Issues of the Albemarle – Pamlico Estuary with an Emphasis on the Albemarle Sound”

Jennifer’s presentation discussed the NC Basin-wide Planning Program, Basin-wide Water Quality Plans, Surface Water Quality Classifications, Designated Use Support Assessment, and the APNEP Area & Water Quality.

Basin-Wide Planning:

- The Basin wide Planning Program applies to all 17 river basins in NC. She is basin planner for the Roanoke, Neuse, Cape Fear and Lumber basins. Basin-wide Planning Goals are to identify water quality problems and restore impaired waters, identify and protect high value resource waters, protect unimpaired waters, and to support responsible economic growth.
- Basin wide Planning Objectives are to work with other agencies, to develop appropriate management strategies whether or not the problem is point or non-point in nature, assure equitable distribution of waste assimilative capacity, better evaluate cumulative effects of pollution, and to improve public awareness and involvement. A key to this is that we look at cumulative effects over the entire basin and not just a few isolated tributaries.
- Basin wide Planning Benefits include fostering of public participation, focusing resources, promoting comprehensive NPDES permitting, using sound ecological planning, and integrating and coordinating programs and agencies. For instance we synchronize the NPDES permits within the basin so that they are all opened at the same time and last for the 5 years of the planning cycle.
- The plans contain specific management strategies for point sources, general recommendations for non-point sources, collaboration by non-point source agencies, voluntary initiatives, local governments and Citizens, and guidance for obtaining funds for projects. So included in the plan is a discussion of what this group is doing. Jennifer will work with Greg on drafting language for plan, winter 2005/2006.
- The current Roanoke and White Oak River Basin-wide Water Quality Plans were completed in 2001. The NC Division of Water Quality (DWQ) collected biological data in summer 2004. The use support development is being drafted in 2005. The plans will be finalized in 2006. Chowan, Pasquotank, and the Neuse River Basins Plans were completed in 2002. DWQ is to collect biological data this summer. The plans will be revised in 2007. The Tar-Pamlico River Basins Plan was completed in 2004. DWQ is to collect biological data in 2007 and the plan will be revised in 2009.

Water Quality Classifications:

VA is much like NC in that we both have diverse ecosystems across the State. There are high gradient mountain streams, piedmont type streams, tidal rivers, estuaries, and swamps. This challenges environmental managers when it comes to making good decisions. One tool we use is surface water quality classifications.

- Primary classifications for freshwater are C, B, and WS I-WS V. Salt Water primary classifications are SC, SB, and SA, with the S indicating salt water. Class C indicates the waters are designated for the protection and propagation of aquatic life and secondary recreation uses. Propagation means the species can live happily enough to reproduce. Class B adds the primary recreation use, or full body contact swimming. WS I through WS V classifications are for various categories of water supplies. SA in saltwater is for commercial shellfish harvesting and primary recreation.
- Supplemental Classifications include NSW for nutrient sensitive waters, HQW for high quality waters, ORW for outstanding resource waters, Sw for swamp waters, Tr for trout waters. An example classification for the New River (This New River drains to the coast, not to the Ohio Basin) was given as C NSW, SB NSW, SC NSW and SA HQW.

Designated Uses:

Based on NC Surface Water Classifications, the designated uses are protection and propagation of aquatic life, recreation, shellfish harvesting, fish consumption, and water supply. The uses are defined in laws as narrative and numerical standards. They are in the NC "Redbook".

DWQ Data Collection:

The NCDENR-DWQ collects samples and analyzes for the following categories of data so it can determine if designated uses are being met. The data collected includes:

Aquatic benthic macro invertebrates and fish community (biological monitoring), ambient sampling (parameters including DO, pH, temp., turbidity, chlorophyll a, and fecal coliform), Fish tissue analysis (examines meat of fish for toxic compounds), toxicity tests (checks water samples to determine acute and chronic toxicity effects on test organisms), and lakes.

Use Support Ratings:

After the data is assessed the ratings for a particular use are: **Supporting:** Criteria Not Exceeded; **Impaired:** Criteria Exceeded; **Not Rated:** Inconclusive Data; and **No Data:** No Assessment Made.

Use Support Categories:

- These categories are Aquatic Life, Recreation, Shellfish Harvesting, Fish Consumption and Water Supply. For each of these categories there will be a use support rating. So one water-body can have up to 5 use support ratings, depending on its classification.
- Aquatic Life is assessed for all waters using the biological monitoring data as a direct measure and the ambient monitoring data is compared to the certain numeric criteria, such as dissolved oxygen or pH. Waters that exceed the standard in greater than 10% of samples are rated impaired.
- Recreation is assessed for all waters using the parameter fecal coliform bacteria. This data is gathered at ambient monitoring stations, special study sites, and from Division of Environmental Health (DEH) Recreational Monitoring Advisories on the coast. Fecal coliform bacteria criteria are considered exceeded when annual evaluation shows a geometric mean >200 colonies/100 ml or 20% of samples >400 colonies/100 ml. Class B, SB and SA waters that exceed fecal coliform criteria are prioritized for re-sampling to assess the standard. Class C, SC and WS waters that exceed fecal coliform criteria receive lower priority for re-samples and are not rated. Criteria are exceeded when DEH closes a swimming area more than 61 days of the 5- year assessment period. Swimming areas closed more than 61days are considered Impaired. This is one of the uses on the Dan that appears different in NC than in VA. The reason it was not the same is that we did not have enough data to assess. The next go around it will be impaired on our side also because we have the data. Another issue may be that the standards are different on each side of the border. Or it may be a different category. For example VA may have collected benthics and assessed for aquatic life and perhaps we did not.
- Shellfish Harvesting is assessed only for Class SA waters. The criteria are based on DEH growing area classifications. SA waters classified as prohibited, restricted and conditional are impaired. SA waters that are classified as approved are rated supporting. DEH growing area classifications are based on fecal coliform bacteria data.
- Fish Consumption is assessed for all waters. The assessment criterion is based on Department of Health and Human Services (DHHS) fish consumption advice and specific advisories. Waters with specific advisories are impaired. All of this is based on our fish tissue data.
- Water Supply is assessed on criteria based on the ability of water treatment plants to deliver potable water rather than on standards for raw water. Regional water treatment consultants provide water quality related intake closure information. All WS waters are supporting on an evaluated basis.

Water Quality Issues:

- The main impairments in the Albemarle – Pamlico Sound area are impairments for shellfish harvesting. A map was displayed showing the areas. Most of these are around the Outer Banks and the Tar-Pamlico Basin. The impairments are generally where you have developments and storm-water pipes.
- Most of the Albemarle Sound is shown supporting its designated uses. The gray area means that it is not rated. The reason it appears so peachy is because we do not currently have a criteria to assess the aquatic insects or fish communities for these types of estuarine waters and give them a rating.
- In the Alligator River we get a few hits of low DO due to swamp drainage, etc.
- There are some issues in the Lower Roanoke involving low DO, bank erosion, the salt wedge during drought conditions, hydrilla in Lake Gaston, and prolonged floodplain inundation. She displayed some recent data and pointed out where some ambient monitoring and bio-monitoring stations were located. There may be some new listings rated impaired for aquatic life once she begins the assessment. There are a number of studies underway including the J.H. Kerr Section 216 with the USACE, VA & NC participating. There are also the FERC Re-Licensing Requirements of Dominion Hydropower Projects. USGS is looking at DO and floodplain inundation while USFWS studies bank erosion, birds, and other critters at the national refuge. Wildlife Resource Commission has studied the fishing resources such as the shad and striped bass runs. Weyerhaeuser has studied the dioxin contamination in Welch Creek.
- The next slide discusses an area I believe would be a good opportunity for us to collaborate on upriver. This is in Stokes County where the Dan River enters from VA. This is Danbury and Hanging Rock State Park is located near here. Excellent Park, I highly recommend it. In this part of the river we have collected endemic species of fish and phenomenal mussels including a unique mussel not found elsewhere. Archies Creek contains an excellent fish community, which I think included 4 endemic species and 11 cutlip minnows. It is not currently rated as a ORW or HQW but I believe this would be an area the 2 States could collaborate on to protect. This whole stretch is very interesting. On our side the Dan is classified as trout waters which have lower turbidity standard, 10 NTU, vs. 50 NTUs for other streams. There is an ambient station near Francisco where the standard has been exceeded. The chances are high that this section of the river will probably become impaired. Where I see us collaborating is on issues like these. For instance have you reached out with your soil and conservation folks to see how this land is being managed? I am currently preparing to meet with our Division of Land Resources and Div. of Forest Resources and Soil and Water Conservation districts. Approximately 75 % of this is forested. Not certain about the level of forestry industry but I will figure it out. Are there mining activities? I am working on our regulatory guys to get answers. I have driven this and crossed the Dan everywhere you can cross it. All of this land is so rural and beautiful. I really think these are areas where we can really work together and it will be easier to get a handle on.
- **Question: Tim Ott asked if the plans addressed water quantity at all.** There is a chapter on Water Resources which primarily talks about inter-basin transfer, if there are any, where they are at, and who requested them. **Tim replied I thought you would because of the NPDES Permit program including water intakes and withdrawals.** This chapter in the plan is actually written by our DENR-Division Water Resources. The NPDES program is set up on 7Q10 flow so we do not really go into withdrawals and discharges. We focus on water quality and those issues are covered in another report.
- **Comment: John Feild stated that it seems to focus on Water Quality, and we have noticed that wherein the Dan is impaired or polluted in VA it is not in NC. It leaves Danville and is polluted, is clean in NC, hits VA again and its back to being polluted. The inference is that VA is really polluting the river, NC cleans it up, and VA pollutes it again. So either the**

terminology or methodology needs to be standardized between the States. We do not want to give the impression that the stretch in NC does not need any attention. VRRBAC would like to see some coordination between the 2 States and plans to discuss this when the Bi-State Commission begins to meet. Jennifer said she had a slide about this later in the presentation and will discuss the reason it's like this.

- **Question: John Feild asked does the volume of water going by help determine whether or not it is impaired. For example if water was removed from the Dan below Danville at Milton could that impact the rating, given the loading remained the same.** That depends upon a lot of factors. Certainly water removed and not returned could have an impact on permissible load. So a facility that was permitted for a load at a certain base flow would be impacted if that base flow was significantly lowered. Prior to that happening they would have to let others know about it. **Like through an environmental impact statement.** Yes. If it has State funds attached to it. If it is already impaired there may not be permission to do the withdrawal.
- **Question: Bob Conner asked if the Hg advisory included Lake Gaston and down.** Yes. You might want me to come back after I do my writing. There may be other streams which drain below to Gaston below Kerr that will be included. The advisory is for women of childbearing years, children under 15 and below and is X amount of meat per week. **Bob stated this is based on NC's position. If VA sees it I have not followed it closely but it could be bad for tourism.** **differently, then we have a problem.** The Hg is a global problem and is due to emissions. The Hg may come from Canada, China, Mexico, etc. US Hg emissions travel to other countries also. **I know this area and I do not know of any industry that worked with Hg. Is it coming from upstream?** It is from atmospheric deposition that falls in the rain and gets in the water. Much of it is from burning coal. The high winds move it around and it is deposited through the rain. It's not just one facility sitting on the banks of the Roanoke River. **Mike McEvoy will it be listed on the 303 d list as impaired?** No. The streams are impaired on an evaluation basin based on similar samples collected across the State. Since there is not specific data from these streams they will not go on the 303d list at this time. **A comment was made we can not deal with assumptions, we need facts.** This advisory was based on actual data across the state. We found in this study that 3 freshwater fish, Bowfin, large mouth bass, and pickerel were contaminated. Therefore an advisory was issued. **Harrel Johnson said it is important that everyone understand the nature of an advisory. An advisory is issued by DHSS based on a risk analysis. It does not mean that there is contamination of the entire population of fish, but rather there was some contamination seen in the study and a risk analysis is done and they expand it out. It does have an impact on tourism. We need the counties to explain how the advisories were derived from risk analysis rather than the actual concentration in the fish.** Bob Conner said this is the first he has heard of this, but if the news media writes a story than it could effect development and economics east of I-85. Jennifer said this is all the way down to FL. **It was commented that this information is going out in a manner that is not self explanatory. People make assumptions and we get persecuted for it. Our tax base and everything else goes down hill because someone assumes that all fish SE of I-85 are unusable.** Charles Poindexter said that we have the same thing with PCB and stripers. Our Lake Associations and media are trying to improve their communication by explaining what advisories mean and do not mean. Ann Austin said you can go to your local grocery store and get farm raised salmon. Anywhere you read it says to eat it only once per month. Bill Crowell said that generally when these advisory issues hit the media there are elevated concerns which are forgotten in a couple months. **Read asked if there was a dioxin advisory for the Cashie?**
- **Question: Read Charlton asked is the shrimp industry in the Pamlico Sound still strong enough to impact the economy.** Bill Crowell said that it was in decline but earlier this year they were having a good year.
- **Question: Dr. Cutler asked how the upper basin impacts the sound, if at all.** Generally I do not think it does. Every thing drains to Kerr, and then Gaston and Roanoke Rapids. These impoundments probably help lessen any observed impacts. **Bill Crowell said most of the issues downstream are related to the flood releases from the dam.** The lower Roanoke area is currently

not rated.

- **Question: Bob Conner asked if there were any farming organizations that she was working with, because farmers are utilizing the property along the Dan and Roanoke.** That is where the Soil and Conservation and NRCS folks are housed. They are communicating with them.

Sub-committee Reports:

Agriculture and Forestry

Haywood Hamlet indicated that there was nothing new to report. He hoped to initiate something soon.

Municipal Interests and Permit Holders (MIPH)

- John indicated that that there was good geographic representation of the basin on MIPH but he would like more from the lower basin to participate. He asked for any nomination to be sent to him.
- He said the MIPH wanted to compile a current inventory of permit holders and their present consumption and projected needs. MIPH plans to send a survey and cover letter to the permit holders for this purpose. He wants the endorsement of the committee to send this out after the draft is reviewed and commented on. The draft letter and survey are below. **John Feild said that DEQ in Richmond has an inventory of permit holders and their projected uses.** John Lindsey asked if that included Federal and local facilities. **John Feild said he should check with DEQ on that but he expected it was pretty thorough. Another aspect is that they may be permitted for more than they are taking.** The survey asks for present, permitted, and projected needs. **John Feild said the WSP TAC is addressing this issue. They are trying to make the permits reflective of actual usages rather than allowing the garnering of more water than they can use which ties it up the resource. It is anticipated that there will be a rush of applicants to attempt to lock up allocations for the future.** Greg is to check with Scott to see what information is available. **Tim Ott believes that this information may also be available on the EPA web-site.** Robert Conner said that we can get the data on the permitting process. We are going through this with the Roanoke River Water Authority. Everyone is saying allocation, what do we get? We have never said you will get X number of gallons. What we are doing now is some long range planning. You tell us A-Town how many gallons you need in 2008. We need to know the consumption along the basin in 2010, 2020. This will be left up to our kids and grand kids but we need to make sure that there will be adequate water for the people of the basin. We can not let these big cities take our supply. We must look out for ourselves. That is an advantage for this committee in that we are working together on the common goal of protecting our water source for our use. **Dr. Cutler suggested that there was professional expertise at the area colleges, such as VT and Roanoke College, who could help with the design of the survey to help assure maximum participation.**
- John Lindsey submitted minutes of 2 sub-committee meetings. These are presented as follows:

**Report of the Municipal Interests and Permit Holders Sub-committee
Virginia Roanoke River Basin Advisory Committee
July 26, 2005**

The sub-committee held meetings May 7th and July 9th with good representation from the upper basin. Barry Dunkley of Danville has joined the sub-committee and brings valuable expertise, but we still seek more representatives from the Brookneal and Halifax areas in the lower Virginia basin. We will pursue any nominations the Advisory Committee may make.

Members of the sub-committee have discussed the BROOM Computer model with Brian McCrodden and

determined it has potential to assist The Advisory Committee to evaluate the downstream impact of withdrawals that may be proposed from the upper basin. We feel this could help to provide a firm statistical basis for recommendations the Advisory Committee may make to members of the General Assembly.

We have developed a brief introductory letter and survey to be mailed to all known Permit Holders in the Virginia portion of the basin. Follow-up telephone interviews will be made to those who do not return the survey. This survey should enable us to compile an inventory of current active withdrawals and discharges, and hopefully, to open lines of communication to develop reliable estimates of projected basin needs for water through the year 2050. We seek the approval of the Advisory Committee for this survey and your suggestions for support to reproduce and distribute it. The Introduction and the Survey are attached for your consideration.

A list of the current sub-committee membership is at Attachment 2.

Respectfully submitted,

John Lindsey, Chair

Municipal Interests and Permit Holders Sub-Committee Virginia Roanoke River Basin Advisory Committee.

**Bi-State Roanoke River Basin Commission
Virginia Roanoke River Basin Advisory Committee
Municipal Interests and Permit Holders Sub-Committee Survey
August 4, 2005**

Please complete and return this survey to the address below at your earliest convenience. Your prompt attention is greatly appreciated.

1. The contact for this survey should be:
Name..... Telephone.....
Address..... Email.....
City, State and Zip Code
2. Are Withdrawals and/or Discharges currently being made? Yes / No What
volumes? Daily, Weekly or Monthly?
3. Where is your Intake/Discharge located?
.....
.....
4. What permit restrictions or physical limitations hinder your withdrawals or discharges? Please explain:
.....
.....
.....
.....
5. How do you expect your operations to change in the next 10, 20, 30 40 and 50 years?
.....
.....
.....
.....
6. How will this affect the volume of water needed or discharged? (Please explain). (Your best estimate
will be better than ours)

.....
.....
Thank you for completing this survey.
Please return to John Lindsey, 320 Fingerlake Road, Penhook, VA 24137.

Sincerely,

John Lindsey, Chair (Email: johnlndy@yahoo.com)
Municipal Interests and Permit Holders Sub-Committee
Virginia Roanoke River Basin Advisory Committee

**Virginia Roanoke River Basin Advisory Committee
Municipal Interests and Permit Holders Sub-Committee Survey
August 4, 2005**

(Recipient's Address)

Dear Sir:

The Bi-State Roanoke River Basin Commission was created by Virginia and North Carolina to identify basin related issues and recommend appropriate solutions; to undertake studies and prepare, publish and disseminate information through reports, and other communications related to water quality and other natural resources of the Basin; and to promote communication, coordination and education among the stakeholders within the Basin.

The Virginia Roanoke River Basin Advisory Committee makes recommendations to the Virginia members of the Bi-State Commission and assists in carrying out the objectives of the Bi-State Commission.

The Municipal Interests and Permit Holders sub-committee is tasked to identify those entities that hold permits issued by a federal, state or local regulatory agency pertaining to the water of the Basin, to determine known current and projected needs to facilitate planning for the effective use of these resources, and to identify probable future shortcomings where they may exist. As a Permit Holder, you are entitled to representation on this committee.

Our intention is to compile a current inventory of Permit Holders and their respective needs to facilitate our tasking. The data we compile will be available to all stakeholders, upon request. All identification will be removed from any data released to the public. Your cooperation is essential to ensure that meaningful data is collected and accurate projections can be formulated.

Please complete and return the brief survey attached. We will appreciate any comments and suggestions you have to improve the program. Please contact me if you have any questions.

Sincerely,

John Lindsey, Chair
Municipal Interests and Permit Holders Sub-Committee, Virginia Roanoke River Basin Advisory Committee
320 Fingerlake Road, Penhook, VA 24137
Phone: (434) 927-5972 Email: johnlndy@yahoo.com

Rivers:

Watt Foster was not present. Read Charlton said he made a trip to Weldon to fish for stripers and another to the delta area where the Roanoke, Cashie, and Chowan Rivers and Wains Creek enter the sound. He commented on the beauty of the area and the presence of eagles and other wildlife.

Water:

- Mike McEvoy mentioned the Roanoke River TMDL meetings to be held in Roanoke and Montgomery Co. on Aug. 4.
- He has been attending the Lake Nutrient Standard TAC meetings. A draft regulation for nutrients in lakes has been presented. Chlorophyll A is proposed to be used as an indicator for nutrients. There will be 3 classifications of lakes, cold, cool, and warm, each with its own Chlorophyll A standard. EPA would like to see when the standard is exceeded in either public or state sampling that a TMDL would be triggered. TAC members believe that the Chlorophyll A value should be used as a screening tool. If exceeded there would be a use attainability to see if the body was meeting its designated uses prior to putting it on the TMDL list. There will be a comment period prior to approval of the final regulation. Next meeting is the second week in August.

Lake Interests:

- Charles Poindexter informed the group of the approval of the submitted Shoreline Management Plan at Smith Mt. Lake by FERC, after about a 1 year period. The order accompanying the approval letter was 30 pages vs. the normal 2-3. The EEA brought the total order to 60-70 pages. The counties, Franklin, Bedford, Pittsylvania, and Campbell, since last meeting, had agreed that TLAC would negotiate on behalf of the Counties and to work through the license process with FERC and AEP. There were some things the counties won and lost and vice versa for AEP. For instance AEP is now required to submit all variances to AEP. AEP has been given quite a bit of power too. He anticipates there will be a local resolution to set up a mechanism to handle issues with the power company without FERC involvement. The order requires a number of studies to be conducted including sedimentation, water quality, fish, debris, navigation systems, and water level. These studies are on a quick timeline and must be completed by 2006. AEP has already hired several consultants/contractors to begin work. We have had a cut at what to study and the objectives, etc. of the study. A positive outcome of this process has been the level of agreement with the entire community, such as the Lake Association groups, agencies, and localities. After the studies are done is when the final negotiations for the license will take place.
- John Feild mentioned the bill requiring a game warden on SML daily. Charles confirmed this bill passed the General Assembly this year during summer boating season. This was supported by all of our regional legislators.

Other Business:

VRRBAC Bylaws:

VRRBAC Bylaws have been changed to reflect the discussion from the last meeting. These were approved in the March 9 meeting minutes.

VRRBAC Future Direction:

- Chairman Poindexter broached the subject of the Committee's direction for the next year or two. This includes topics for future meetings, issues we want to look at, products we might want to handle, etc. **Bob Conner stated that VRRBAC has been meeting for 3 years. His opinion is that we should have a brainstorm session, list our recommendations (such as VRRBAC is against inter-basin transfer), and send it to our legislative members and the Governor. We need to state that here is the point VRRBAC has reached and VRRBAC needs to know if NC is going to collaborate with us. We can meet and rehash things but unless NC agrees with us or we reach consensus we are wasting our time. This is the job of our legislators and the Governor to push this issue with NC.** Charles said you are suggesting that we should state our

positions and concerns and draft letters to them. **Bob said this committee is not a political committee. He sometimes thinks it was decided that this committee was formed to get others off the backs of the legislature.** Read Charlton asked if it would be wise to get this done prior to the next General Assembly. He concurred with getting our recommendations to the legislature. **Evelyn Janney said that we need to get to the question of how serious is the legislature about VRRBAC, since we have not been given any funding. Do we work 10 more years without funding? Many have had more expenses than me and it's not cheap.** Haywood brought up the fact elections are this year and that the Bi-State Commission citizen representatives, as appointed by the current Governor, may never even go to a meeting of the Bi-State Commission, before new appointments are made by the next Governor. We are at a crossroads and don't know which road to take. **Evelyn said there is too much work that has been done to just be dropped.** Chairman Poindexter said he agreed, and that at a minimum we should put on paper our conclusions in case things change. **John Feild stated that there had been several new members and they were starting to pick up on our frustrations. We do not want to dampen their enthusiasm to participate in this group. We also do not want our Commission representatives to never have an opportunity to present the issues we have surfaced. John concurred with the notion of getting our concerns and conclusions in a concrete format and to the legislators. He emphasized that it needs to be done in a timely fashion so we do get the support.** Bob Conner said they have the right to accept or reject what we come up with but we at least need to have their support. **Dr. Cutler said there are a couple aspects that should be considered in making a meeting such as this successful. The first is to have a framework/outline to have a starting point to write our thoughts. Maybe even have some alternative statements to consider. The second would be to have a facilitator to lead us through putting our ideas on paper, reflecting upon them and agreeing on it. That way there will be some preparation and structure required for the meeting. Everyone will need to come as prepared as possible, having thought about it and knowing what our alternatives are, to help keep it focused.** John Feild said all of this is valid. He did not know if we could find a bona fide facilitator but perhaps DEQ would have someone available. Something structured as indicated would help, such as a straw-man put up on the internet for everyone to consider and comment on. Then a product can be produced to be shaped and sent forward. **Chairman Poindexter said he was confused over are we talking about a large meeting and a large document or a 1- 2 pager with our conclusions.** John Feild said it was something to get out to be considered prior to getting to the meeting. **Bob Conner stated that you know that you can have a facilitator and have one sentence that is turned into two paragraphs that you do not understand. Again, let us list our recommendations, send it to the legislators, and see if they agree.** John Feild said in the WSP TAC the inter-basin transfer issue is to politically hot to handle. The TAC will not address it. If that one issue can not be addressed then what product are we producing in planning? We must goad the General Assembly in deciding this issue. This should be one of our bullets. **Dr. Cutler stated that other recommendations to include are funding and making suggestions to different State agencies. For example, perhaps having State Agencies collaborate with NC so that we develop rapport and a sense of cooperation with NC involving dollars, maybe specific recommendations for agency reorganization, or beefing up staffing and funding. We need to elicit a positive response from NC.** John Feild said if we can get something surfaced for everyone to comment on than we will have starting point to massage into a final document. **Charles volunteered to take a whack at developing a straw-man for consideration of the others. He did not seeing it being too large of a document.**

- Read Charlton brought up best management practices (BMPs) and that VRRBAC should support these as mentioned at an earlier meeting. **Dr. Cutler said that the Board of Trustees of the Va. Outdoor Foundation for Conservation Easements has changed the template for conservation easement to require BMPs. VRRBAC could also advocate conservation easements to protect watersheds.** Evelyn Janney responded farmers do BMPs. We saw some of these at the meeting at VT Kentland Farms. **Chairman Poindexter asked what we say about BMPs, the State has already funded them.** Dr. Cutler stated BMPs should be mandatory as they are currently voluntary. **Read Charlton asked if VRRBAC should support BMPs being mandatory.** Evelyn Janney said that she did not know if she would go with mandatory or not. **John Lindsey commented that adequate compensation should be added if they are to be made mandatory.**

Dr. Cutler replied no you don't, that's part of the job to protect water quality! **John Lindsey said no sir.** Evelyn Janney asked what about the farmers who have to feed the wildlife but yet they lose part of their income in doing so. The BMPs have been partly farmer and partly State when money was available. Some of the farmers do not make enough to go out and put these in. It may make the difference in survival and feeding their family. **Dr. Cutler responded it just means they keep the silt out of the creek by putting in culverts and gravel on paths and that sort of thing.** Read Charlton said at a recent timber sale he was involved in that the State Forester required a company to come back in and put some in. **Chairman Poindexter commented there are BMPs for forestry.** Dr Cutler replied yes but they are voluntary. **Chairman Poindexter stated no if you do not do certain things the forester can come out and make you do it. That does not fall to the local governments. That is a different standard then erosion and sediment control. There will need to be more discussion on this mandatory BMP issue, as there are situations that warrant some consideration. Are there any other major points. If not I will try to put the straw-man together.** John Lindsey said the timing is critical to get this out so right after the fall meeting so that it is done and to the General Assembly prior to the session. **Chairman Poindexter said I will bring it to the next meeting or send it out before hand so that you have time to consider it. We will have discussions and whatever we decide upon will go to the legislators by the end of October, November or December.** Dr. Cutler said with respect to the cost to the farmer and logger there is no reason we could not also advocate cost share programs to cover the costs of doing these things. That is what the Soil Conservation Service now called the Natural Resource Conservation Service has been doing for 50 years. **John Feild said the State is involved in weed control and nuisance species and so forth.** Bob Conner said he was meeting on soil conservation two weeks from now. The program is a federal government initiative to help farmers remove cattle from streams and to provide alternate water supply. This area is already established so we need to move on to something else to hang our hat on. Money is there for that purpose. **John Feild indicated that a place should be marked in the straw-man for other issues to be added.**

- Tim Ott stated that there are apparently no rules governing where municipal sludge can be applied. **Mike McEvoy said that is wrong, as there are a whole set of 503 regulations out there.** Tim replied no one is checking on it. **Mike McEvoy answered that is an agency resource issue.** John Feild indicated there are a number of issues that we can develop positions to buffer the basin. **Read Charlton said that the Federal law rules solid waste and biosolids are a commodity and the interstate commerce clause prevents the restriction of commodities from crossing State lines.** Mike McEvoy replied yes but there are national standards on how to apply them. **Tim Ott responded I am referring to the application of them. DCR is regulating farmers on nutrients, nitrogen and phosphorus, with nutrient management plans. These plans will now be phosphorus based which will be much more restrictive than any controls on the municipal sludge.**
- Harold Carawan, Roanoke River Basin Association, said he would provide each member of VRRBAC with a laminated map of the Roanoke River Basin. Bob Conner volunteered to deliver them at the October meeting.

Future Meetings:

- The next meeting will be held in the Smith Mountain Lake area on October 5, 2005. This meeting will be predominantly a strategy planning session for VRRBAC future business. Evelyn Janney invited the group to come to Floyd County for a future meeting. A topic for a future meeting was the endangered mussels in the Dan River mentioned in the earlier presentation by Jennifer Everett.

Skip Wiegersma, Aquatic Nuisance Plant Control, Inc., "Discussion of Lake Gaston Hydrilla Problem and Tour"

Hydrilla is an invasive weed which causes several problems in Lake Gaston. Aquatic Nuisance Plant Control, Inc. is contracted to treat areas of infestation to kill the plant. For additional information please see the following websites:

<http://www.lakegastonassoc.com/Weeds/Hydrilla.htm>

<http://www.aquaticnuisance.com>

- These are the 3 main invasive weeds in the lake. These are hydrilla, elodea, and watermilfoil. These are the 3 main invasive weeds in the lake and are the meanest to control.
- During treatment, one of the problems to overcome is the siphoning effect from the river which pulls the herbicide downstream, reducing contact time. So what we do is to meter the herbicide further back up the cove and let the current pull it downstream to contact the vegetation. We try to contact the plants for 60-90 days. We monitor and dose according to the results to keep the herbicide at an active level. We treat a certain area and often the actual treatment is a greater area which lowers the cost. It cost about \$1000 per acre to treat. Further research on the currents in the lake is needed to effect better treatment. They are trying to get the USACE to study the applications to help determine the effectiveness.
- Before and after treatment pictures shot from satellite were shown to the committee. Many demonstrated effective treatment. In one area, Poplar Ck., treatment cleared out about 2 miles of water. No signs of it reappearing yet, and I hope it will be a 2-3 year effective treatment. Florodone is the herbicide used and is guaranteed for 1 year. A brand name is Sonar. If the plant is sprouting and the tubers can be contacted than we can kill them. If the tubers have not sprouted than we can't kill the plant. Tubers can live in the soil for 10 years. In the Pea Hill Ck. area the 2 bridges helped retain the herbicide so we used half of normal rate and got 2 years of control so far. Six Pound Ck. was treated in 2002 and it is still free of growth. Great Ck. was treated in 2000 and is still showing no signs of return.
- **Question:** Haywood Hamlet asked how you treat it. It is in granular form and we use broadcasters and a blower. It takes a great deal of preparation as you are treating a whole body of water. Need to understand the soil type (some herbicides will bind in the soil and will not release), water flow, depths, currents etc. All of this must be factored into the dose.
- **Question:** Dr. Cutler asked does the chemical affect aquatic animals. There are no adverse effects on fish. The only problem known could come to lawns and other plants through irrigation, so there are restrictions on it for irrigation. If you irrigate at a high rate then you can bleach the lawn. Tomato plants are very susceptible. Will not harm native plants, wildlife, humans or fish.
- **Question:** Charles Poindexter asked if these chemicals are still available to the public to buy and apply in Va. and approved by EPA. Yes anyone can buy and apply. The only restrictions are to public waters.
- **Question:** What is the Lake Gaston Weed Council? The Lake Gaston Weed Council is made of representatives of 5 counties surrounding the lake and is in charge of lake management for vegetation control. Does each county contribute? Yes.
- **Question:** Haywood Hamlet asked if it would kill other plants like tobacco or corn. Only at high application rates. We monitor the concentrations going in and the residual present in the water and try to keep low rates. 80-85 % of vegetation control is in the herbicide cost. So if we keep that down we can treat more area. We manage the dosage and take samples and test for it about every

week or two. We determine a target dose and try to keep at a lethal level of between 1-5 ppb. It can fluctuate with such as conditions with dam operation. Ideally it would be at 2.5 ppb. Most plants won't be impacted until you reach 10 ppb.

Hydrilla Boat Tour:

The Committee then went to Poplar Creek to view the hydrilla. Poplar Creek Marina provided the boats for VRRBAC to use.

Adjournment